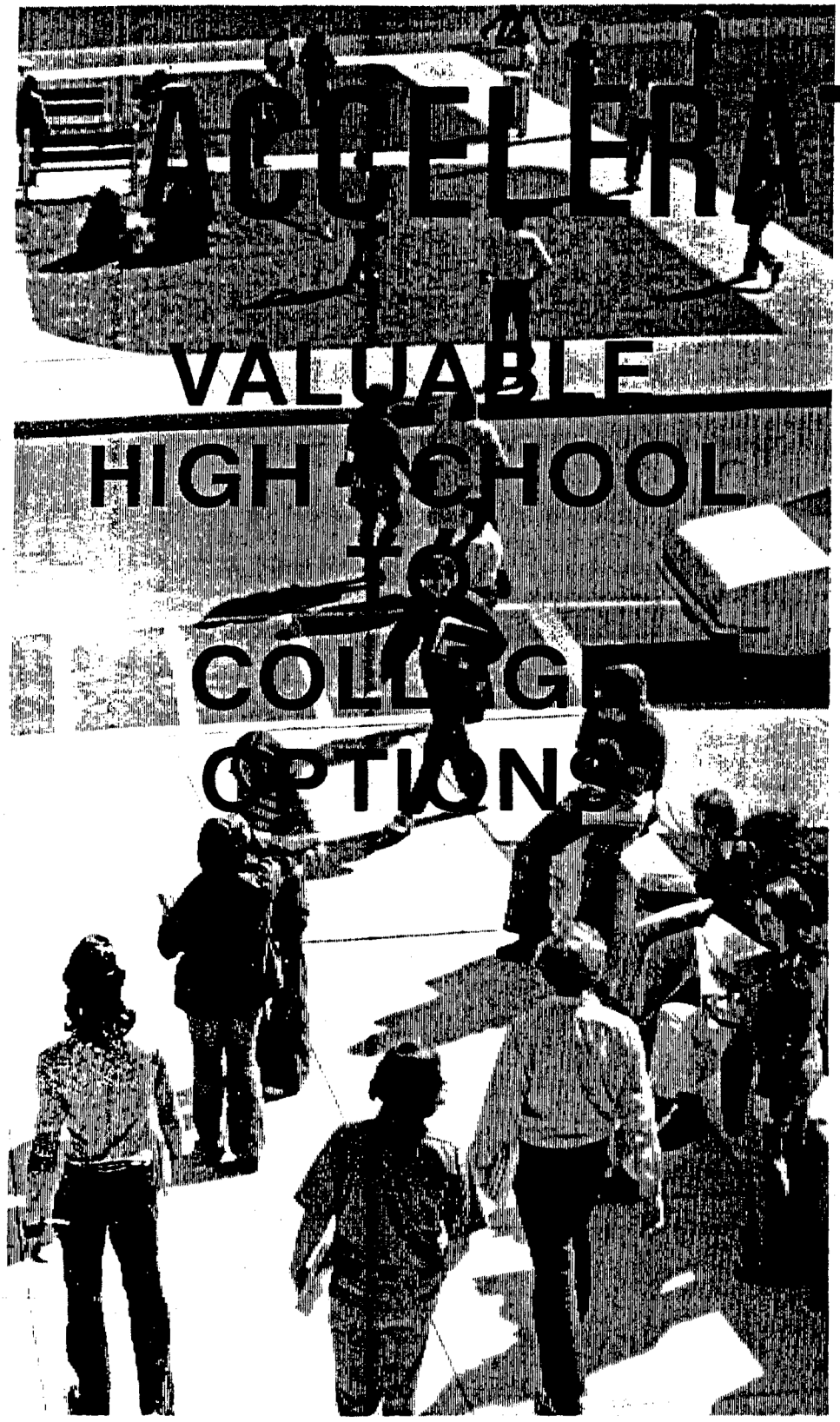

ACCELERATION: VALUABLE HIGH SCHOOL COLLEGE OPTIONS

By Nancy M. Robinson and Kathleen D. Noble

For the young person whose intellectual development is markedly above average, the pace of ordinary secondary school classes can be deadly, "like going through every day in a slow motion movie," according to one student. To a 12-year-old with an IQ of 150, whose mental development in important ways resembles that of the average high school senior, six more years of junior and senior high school can seem forever. This discouraging perception leads many students to "turn off," abandoning the intellectual pursuits that once held so much promise of self-fulfillment and becoming at-risk for a variety of difficulties: marked underachievement in school and consequent exclusion from the colleges of their choice; irritability, discontent, and depression; and for some, substance abuse, suicide, or delinquency. Even students who remain focused academically, who control their impatience and earn good grades, are not immune to the lack of challenge in the ordinary curriculum, a situation which practically guarantees that they will not acquire the habits of thought or study they will need to fulfill their potential as first-rate scholars and innovative problem-solvers of the future.

Challenging secondary programs do exist. Some students are fortunate enough to attend college preparatory high schools that are intellectually demanding and envigorating, although these programs do not usually target

gifted students per se. For others, the high school International Baccalaureate program provides a serious academic program and may lead to some college credit. Specialized and accelerated schools like the Bronx High School of Science, Hunter College High School, or the North Carolina School of Science and Mathematics may obviate the need for additional acceleration, because such schools are typically attuned to the individual talents of students and make available opportunities to proceed at their own speed.

For most highly capable secondary school students, however, acceleration toward and into work at the college level is a more feasible avenue to achieve an optimal educational match, an appropriate fit between readiness and opportunity (Robinson & Robinson, 1982). Some students can profit from acceleration across the board, while others need it in some domains but not others. Some need to move very rapidly toward college while, for others, entering college a year ahead of schedule is more appropriate. Options are needed, and fortunately are available, to match the characteristics of various students.

Part-Time Accelerative Options

For the bright and mature student, folklore to the contrary, the senior year is often the hardest to endure. Students who utilize part-time accelerative options generally plan to leave high school about a year early, often having fulfilled some of their high school requirements with college courses which have earned them credit at both levels. Among the part-time options available in most communities are the following:

1. Planning a high school curriculum that omits some graduation requirements but fulfills the entrance requirements for the college(s) of choice.
2. Skipping or compacting the steps in sequential courses such as mathematics or language, sometimes with a bit of independent work or tutoring to smooth the transitions. Many students can, for example, undertake algebra without the customary "pre-algebra," or can work ahead of classmates during French I in order to move directly to French III the following year.
3. Utilizing Advanced Placement courses and examinations eligible for credit once the student enters college. (Note that students are not required to take AP courses in order to take the examinations, though they certainly help.)
4. Enrolling in challenging summer programs which yield high school credit, such as those offered in connection with the regional talent searches.
5. Taking correspondence (occasionally, televised) courses for high school or college credit. This option usually works best if two or more students take the course with the support of an adult who helps keep them on track.
6. Enrolling in community college or university courses at a nearby institution concurrent with high school during the summer or the regular academic year, either going beyond course sequences completed in high school or as a way of exploring new areas.

It is important to distinguish between meeting academic requirements through mastery of an accepted curriculum, in or out of class, and self-directed study.

Independent study of a topic of interest is not strictly an accelerative option, although it can be extremely valuable and deserves encouragement. It is important to distinguish between meeting academic requirements through mastery of an accepted curriculum, in or out of class, and self-directed study. Independent learning can be a source of pleasure (and profit) throughout life, and students deserve time and energy for such endeavors. Yet, it is generally more effective in meeting academic requirements at an accelerated pace to follow a coherent curriculum than to attempt to create one de novo.

Full-Time Accelerative Options

Almost every college and university has some provision for admitting students one to several years early; on almost every campus, one can find a few very young students. Yet, although they have achieved an academic match, those who have entered more than 1, or possibly 2 years early, may find themselves socially and emotionally out of step with their regular-age classmates.

A number of special programs do exist, however, that encourage and support early entrance to college. These programs tend to enroll sufficient numbers of bright students to provide both a social match in the form of a peer group, and an educational match in coursework. They provide a variety of models.

Mary Baldwin College in Staunton, Virginia, for example, enrolls gifted young girls one to four years early in a small, liberal arts college with peers who are equally young and equally bright. Simon's Rock of Bard College takes students as young as tenth grade. The Texas Academy of Mathematics and Science at the University of North Texas enrolls college students who are exceptionally talented in mathematics and science, during what would have been their junior year in high school. At California State University, Los Angeles, The Early Entrance Program is modeled on an early version of the program described below. Finally, the Matteo Ricci, a joint program of Seattle University and Seattle Preparatory School, though not particularly devised for gifted teenagers, compacts high school and college into a 6-year program.

The University of Washington's Transition School and Early Entrance Program

The Early Entrance Program (EEP), created by the late Halbert Robinson in 1977, is another such effort to provide an optimal match for adolescents with advanced academic abilities. The program enables highly capable young people of middle or junior high school age (maximum is 14 years at entry) to accelerate their education radically, entering the University without attending high school at all.

Early Entrance students are teenagers with high intellectual ability and

the motivation to embark upon university level coursework. They are a diverse and lively group from widely different backgrounds. They are selected on the basis of scores on the Washington PreCollege Test (similar to the SAT), Stanford-Binet IV, a 20-minute essay, achievement test records, class grades, teacher recommendations, and extensive interviews with students and their families. Each year, up to 15 young people enter the Transition School, a self-contained, "one-room schoolhouse" on the UW campus. Students enroll full-time in the University at the beginning of the next year. By admitting a sizable group of students and providing an active support system, the program furnishes a warm peer setting, facilities which are a home base, and a special advisor (who is also a psychologist and UW faculty member) so that students can mature, personally and socially, at their own pace.

Most students live with their own families in the Puget Sound area, though many commute relatively long distances by bus, ferry, or carpool. Some from distant parts of the state live with relatives or other families. Eventually, as sophomores or juniors, many move into dorms or group living situations on or near the campus, but the program remains a family affair, with far more contact between staff and parents than is true for most UW students.

The Transition School curriculum does not aspire to encompass the entire body of knowledge to which students would have been exposed during their missed four or five years of secondary school. Rather, it focuses on what appear to be the essential skills and knowledge needed to excel at the college level, as well as an exposure to enough of the wisdom of the ages to foster appreciation and aspirations.

Transition School English develops skill in close reading and discussion of great literature through a few choice examples of genres from various eras, and concentrates on developing each student's ability to write clear analytical prose. One class a week is devoted to review of grammar, syntax, and mechanics for better understanding of how the language can work to convey subtle meaning. The history class teaches students to hone their critical reading, writing, and high-speed notetaking skills while studying the development of western civilization. Transition School mathematics is designed to prepare EEP students for calculus; most entrants have completed a year of algebra, so the class focuses on second year algebra, precalculus, geometry, and the basics of probability and statistics. Through lectures and laboratories, the physics course teaches students to analyze scientific problems and to attach concepts that are not immediately obvious, and serves as preparation for a variety of nature science courses. In addition to these classes, students are provided with a weekly individual tutorial in writing and study skills. Physics is dropped Spring Quarter so that all students will be able to enroll in at least one UW course during their initial year. Some, indeed, outgrow one or more Transition School courses and substitute UW courses before the year is over.

An early entrance program is not the right match for all highly capable students. They must be willing to work very hard during their first year; both they and their families must be prepared to cope with the challenges of a demanding educational program. After that, with their momentum up and their skills finely tuned, students generally find UW courses much less stressful, though no "breeze." Approximately 85% of students who enroll in Transition School proceed to the EEP. These students, known affectionately as "EEP'ers," tend to be highly motivated and self-disciplined; most had a history of being good students and earning high grades in elementary and junior high school, and they continue these habits as undergraduates. They have developed a variety of academic and extracurricular interests.

But these young people are not "nerds" or "geniuses" who read or program computers all the time. Rather, they are real people who face the same emotional and social issues with which their peers are confronted, as well as some challenges that are unique to them. For example, Transition School students, like gifted students everywhere, are unaccustomed to having to work as hard in school as even average students do, and all have to make the initially difficult adjustment of completing 4 hours of homework a day after 4 or 5 hours of classes. Nor are they used to being surrounded by equally capable peers, and during their first few months, most struggle with feelings of inadequacy before relinquishing the need always to be top of the class, as had always been their position before. (Indeed, "top" and "bottom" of the class cease to have much meaning to them.) Students in both the Transition School and the EEP often deal with skeptical or negative attitudes on the part of other people who cannot understand why someone would elect to skip high school. Further, as two EEP'ers said, "inside the University community, many people expect us to be more out of the ordinary than we are," and place demands on students that they may not be able or willing to meet.

After Transition School, EEP'ers generally become well integrated into the University community and add regular-age UW students to their circle of meaningful and satisfying friends (Janos, Robinson, Carter, Chapel, Cufley, Curland, Daily, Guilland, Heinvig, Kehl, Lu, Sherry, Stoloss, & Wise, 1988). Gradually, as they begin to choose majors and to associate with others who have similar interests, they turn up less and less frequently in the EEP lounge, though most continue to visit from time to time. The EEP advisor remains their official academic adviser until they choose a major, and serves as a resource not only before but after graduation.

EEP'ers' undergraduate grade point averages tend to be much higher than those of regular students (3.5 to 3.6 vs. 3.0) and approximately 95% of students who complete the Transition School

. . . during their first few months, most struggle with feelings of inadequacy before relinquishing the need always to be top of the class, as had always been their position before.

and enroll in the EEP graduate from the UW or another institution of higher education. Indeed, about 20% of the students transfer in their sophomore or junior year to other (usually highly selective) colleges. A study conducted a few years ago with four groups of students (EEP'ers, students who had qualified for the program but had elected to enter high school, National Merit Scholarship finalists who entered the UW at age 18, and students matched for pre-entry test scores who entered at age 18) showed that EEP'ers were as well adjusted as the three non-accelerated comparison groups, and most closely resembled the National Merit finalists (Janos, Robinson, & Lunneborg, 1989; Robinson & Janos, 1986).

Of course, not all students are paragons of mental health and high achievement, though in this they are no different than the comparison groups cited above. A study of "underachievers" (with grade point averages below 3.0) suggested that family and adjustment issues underlay the problems experienced by most such males, whose performance tended to be quite erratic. Most of the low-achieving females, on the other hand, were choosing to pursue, for at least a time, a social agenda, and were on a steady upward academic trajectory. The numbers were small, however, and the gender distinction may have been a chance occurrence. (See Janos, Sanfilipo, & Robinson, 1986.)

Although we are currently engaged in conducting a follow-up to ascertain more clearly the long-term effects of radical acceleration, we do know that most of our former students are doing well. Most appear to be satisfied with their choices and satisfied with their lives. Most have strong circles of friends of varying ages. By far the majority have entered the graduate schools of their first choice and are proceeding toward doctoral degrees (PhD, JD, or MD) Some are using their extra years to pursue additional graduate work, with the kind of opportunity to achieve a synthesis between fields that is seldom open to those who are older. (One, for example, is completing law degrees in Japan and the United States in order to practice and teach international law. Another, with a PhD in geophysics, did a postdoctoral academic fellowship and a AAAS Congressional fellowship to prepare for a career in science policy. Several have pursued PhD's in addition to MD's.) Some have taken the time to work and study abroad. Most are able to complete all or most of their graduate education before taking on family responsibilities.

Some are using their extra years to pursue additional graduate work, with the kind of opportunity to achieve a synthesis between fields that is seldom open to those who are older.

It is important to note, however, that these students are not all "off-scale" in their ability. Indeed, on the Stanford-Benet IV administered to entrants in the past 5 years, the average scores have been impressive but not astounding: 144 in Verbal Reasoning, 140 in Quantitative Reasoning, and Composite Score 144. Some students are so astoundingly bright that the Stanford-Binet fails to reflect their true intellectual capability, but these are the minority. None, of course, are weak, though unusual students have had composite scores in the 120's. On the PSAT administered shortly after admission, when most are 3 to 4 years younger than the usual age of high school juniors, mean verbal score in the past 5 years has been 584 and mean mathematics score 613. Those who succeed are highly motivated and they are organized in their approach to life tasks. Many are also highly creative writers, artists, musicians, dancers, actors, or adventuresome computer "hackers." They appreciate the gift of time and use it with relish. The experiment seems to be working.

* * * * *

We have presented in some detail a model of radical acceleration to the college level that represents one end of a broad continuum of options, a smorgasbord from which to choose one or more that fit a particular student. Indeed, especially if students are entering college without the support of a coherent program such as this, a more moderate approach may well be more appropriate. (See Brody & Stanley, in press.)

The success of the Early Entrance program does, however, serve as a reminder that the conventional ways of doing things may not be the only ways, and that calendar age is only one criterion to consider in creating an optimal educational and social match for a student who is ill-served by the ordinary high school curriculum.

It is also wise to remember that, for the teenager who is "different," educational decisions are a series of compromises. There may not exist a perfect solution. One's goal should be a compatible setting, one that energizes and inspires, nurtures and provides support for the student to cope with life's challenges as they come along. As one EEP'er said, "They will just have to have the senior prom without me."

References

Brody, L.E., & Stanley, J.C. (in press). Young college students: Assessing factors that contribute to success. In W.T. Southern & E.D. Jones (Eds.), *Academic acceleration of gifted children*. New York: Teachers College Press.

Janos, P.M., Robinson, N.M., Carter, C., Chapel, A., Cufley, R., Curland, M., Daily, M., Guilland, M., Heinvig, M., Kehl, H., Lu, S., Sherry, D., Stoloss, J., & Wise, A., (1988). A cross sectional developmental study of the social relations of students who enter college early. *Gifted Child Quarterly, 32*, 210-216.

Janos, P.M., Robinson, N.M., & Lunneborg, C.E. (1989). Markedly early entrance to college: A multi-year comparative study of academic performance and psychological adjustment. *Journal of Higher Education, 60*,495-518.

Janos, P.M., Sanfilipo, S., & Robinson, N. (1986). Patterns of "underachievement" in markedly accelerated university students. *Journal of Youth and Adolescence, 15*, 303-313.

Robinson, N.M., & Janos, P.M. (1986). The psychosocial adjustment of youngsters in a program of marked academic acceleration. *Journal of Youth and Adolescence, 15*, 51-60.

Robinson, N.M., & Robinson, H.B. (1982). The optimal match: Devising the best compromises for the highly gifted student. In D. Feldman (Ed.), *New directions for child development: Developmental approaches to giftedness and creativity*. San Francisco: Jossey-Bass.